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In the Claims:

Kindly amend the claims as follows:

1. (Currently amended) A centralised lubrication system for lubricating cylinder faces in large diesel engines, and marine engines, including at least one lubricating apparatus with a number of reciprocating pumps actuated by cams on a rotating control shaft which is a driven shaft, reference means connected with ~~the~~ a main shaft of a diesel engine and ~~which the reference means~~ directly or indirectly indicates position of the main shaft and thereby also position of the an engine piston, sensor means for detecting position of the reference means and thereby angular position as well as angular speed for the main shaft, and said sensor means generating digital or electrical signals indicating these parameters, and a control unit which is connected to and receives said digital or electrical signals from said sensor means and ~~which~~ wherein the control unit includes means to detect the angle angular position as well as the angular speed for the reference means and thereby for the main shaft/engine piston ~~characterised in that it~~ wherein said system includes:
  - an AC motor connected with and driving the control shaft;
  - signal converter means connected to the sensor means and to the control unit;
  - ~~for detecting speed, direction of movement and position of the engine piston and for generating digital or electric signals indicating these parameters;~~
  - wherein the control unit is adapted for receiving the digital/electric signals and is connected with and controls the AC motor for regulating the rotation of the control shaft and thereby the actuation of the reciprocating pumps; andwherein the sensor means include two reference sensors that are ~~displaced from each other~~ mutually disposed along a circumferential direction of the main shaft.

2. (Cancelled) without prejudice.

3. (Cancelled) without prejudice.
4. (Currently amended) Centralised lubrication system according to claim 1, characterised in that the reference means include teeth on a toothed rim that is ~~preferably~~ disposed on ~~the~~ a flywheel of the main shaft, and an index reference means on a side of the toothed rim, and that wherein the sensor means include an index sensor for detecting the a position of the index reference means.
5. (Previously presented) Centralised lubrication system according to claim 1, characterised in that the AC motor is connected with a resolver which is adapted for providing a signal to the control unit for the actual angular position of the AC motor.
- 6-10. (Cancelled) without prejudice.
11. (Previously presented) The lubrication system of claim 1, wherein the rotating control shaft is driven synchronously with the main shaft of the diesel engine.
12. (New) A centralized lubrication system for lubricating cylinder faces in large diesel engines and marine engines comprising an engine piston, a main shaft of the diesel engine, at least one lubricating apparatus including a number of reciprocating pumps, a control shaft, and cams for actuating the reciprocating pumps mounted on the control shaft, an AC motor coupled to the control shaft for driving the control shaft, a detection device coupled to the main shaft for generating signals relating to the main shaft and the engine piston, and a control unit communicating with the detection device and with the AC motor for regulating rotations of the control shaft and thereby regulating actuation of the reciprocating pumps responsive to the signals received from the detection device.
13. (New) The system of claim 12, wherein the detection device comprises a reference device coupled to the main shaft and a sensor device proximal the main shaft for directly or indirectly detecting and relaying the digital or electrical signals corresponding to a position of the reference device and thereby the angular position and the angular speed of the main shaft and the engine piston.

14. (New) The system of claim 13, further comprising a flywheel on the main shaft, a toothed rim on the flywheel and teeth on the toothed rim, wherein the reference device comprises the teeth on the toothed rim.

15. (New) The system of claim 14, wherein the reference device further comprises an index-reference device and wherein the sensor device comprises an index-reference sensor for detecting the angular position of the index-reference device and thereby the angular position of the main shaft and the engine piston.

16. (New) The system of claim 14, wherein the sensor device comprises at least two reference sensors mutually disposed along a circumferential direction of the main shaft.

17. (New) The system of claim 15, further comprising a resolver coupled to the AC motor for providing signals to the control unit indicating actual angular position of the AC motor.

18. (New) The system of claim 13, further comprising a sensing device coupled to the AC motor and the control shaft for detecting and relaying information on absolute position of the control shaft.

19. (New) The system of claim 18, wherein the control unit is coupled to the sensor device and to the sensing device for receiving and processing the signals and the information, regulating rotations of the control shaft and regulating actuation of the reciprocating pumps responsive to the signals and the information received.

20. (New) The system of claim 12, further comprising a driver for synchronously driving the control shaft with the main shaft of the diesel engine.